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Abstract

PURPOSE:To enhance the luminance intensity and reliability by forming an EL light emitting layer as a thin film made by multi-element vapor deposition method using a vapor source consisting of light emitting layer constituting elements, and forming insulation layers provided on both sides of the light emitting layer as a thin film made by atomic layer epitaxial method. CONSTITUTION:A transparent first insulation layer 13 which is 200Angstrom thick and made of Al2O3 and others formed by atomic layer epitaxy using raw materials such as AlCl3 is formed on the surface of a transparent electrode 12. An EL light emitting layer 15, 6000Angstrom thick, is provided being formed by multi-element vapor deposition method using for example multiple vapor source of Zn and S constituting light emitting mother material, and Mn to be a light emitting central layer, via a first intermediate insulation film 14 comprising Al2O3, Ta2O5, and others formed by sputtering or vapor deposition method. Back plates 18 at right angles to the transparent electrode 12 are disposed to form a matrix on the light emitting layer 15 via a second insulation layer which is 2000Angstrom thick and comprising a second intermediate insulation film 16 and Al2O3, etc., formed by atomic layer epitaxial method.